# SA-EX100/S900

# SERVICE MANUAL

Photo : SA-S900 model (US model)

*US Model*
*Canadian Model*
*Tourist Model*
*SA-S900*
*AEP Model*
*UK Model*
*Australian Model*
*SA-EX100*
*E Model*
*SA-EX100/S900*

SA-EX100 is the ACTIVE SPEAKER SYSTEM section in MHC-EX10AV.
SA-S900 is the ACTIVE SPEAKER SYSTEM section in MHC-C9EX.

(Woofer)
With 6 ohm loads driven, from 40 – 3,000 Hz; rated 50 watts minimum RMS power, with no more than 0.9% total harmonic distortion from 250 milliwatts to rated output.

(Tweeter)
With 50 ohm loads driven, from 3,000 – 20,000 Hz; rated 8 watts minimum RMS power, with no more than 0.9% total harmonic distoration from 250 milliwatts to rated output.

**SPECIFICATIONS**

| | |
|---|---|
| Speaker system | Active speaker, 2-way, bass-reflex type |
| Speaker units | |
| Woofer: | 15 cm dia., cone type |
| Tweeter: | 2.5 x 10 cm, electrostatic type |
| Continuous RMS power output | |
| Woofer: | 50 W + 50 W (6 ohms at 40 – 3,000 Hz, 0.9% THD) |
| | 65 W + 65 W (6 ohms at 1 KHz, 5% THD) |
| Tweeter: | 8 W + 8 W (50 ohms at 3,000 – 20,000 Hz, 0.9% THD) |
| | 10 W + 10 W (50 ohms at 10 kHz, 5% THD) |
| Power consumpiton | 60 W |
| Dimensions | Approx. 220 x 455 x 350 mm (w/h/d) (8 3/4 x 18 x 13 7/8 inches) |
| Mass | Approx. 8.2 kg (18 lb 1 oz) net per speaker |

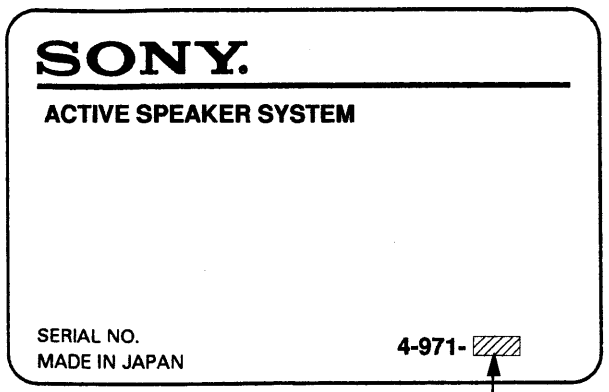
Power requirements

120 V AC, 60 Hz (US, Canadian model)
220 – 230 V AC 50/60 Hz (AEP, UK model)
110 – 120, 220 – 240 V AC adjustble 50/60 Hz (E, Australian, Tourist model)

## ACTIVE SPEAKER SYSTEM

SONY®

## MODEL IDENTIFICATION
*— Specification Label —*




| | | |
|---|---|---|
| SA-S900 | US, Canadian model | : 390-□□ |
| | E, Tourist model | : 391-□□ |
| SA-EX100 | AEP model | : 393-□□ |
| | UK, German model | : 394-□□ |
| | E, Australian model | : 392-□□ |

## TABLE OF CONTENTS


| Section | Title | Page |
|---|---|---|
| SECTION 1. DISASSEMBLY | | |
| 1-1. | Back Cover/Rear Cabinet | 3 |
| 1-2. | Front Panel | 3 |
| SECTION 2. DIAGRAMS | | |
| 2-1. | Circuit Boards Location | 4 |
| 2-2. | Semiconductor Lead Layouts | 4 |
| 2-3. | Schematic Diagram | 5 |
| 2-4. | Printed Wiring Board | 7 |
| SECTION 3. EXPLODED VIEWS | | |
| 3-1. | Cabinet Section | 10 |
| 3-2. | Amp Section | 11 |
| SECTION 4. ELECTRICAL PARTS LIST | | 12 |


## SAFETY CHECK-OUT
(US model only)

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

### LEAKAGE

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.

2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.

3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

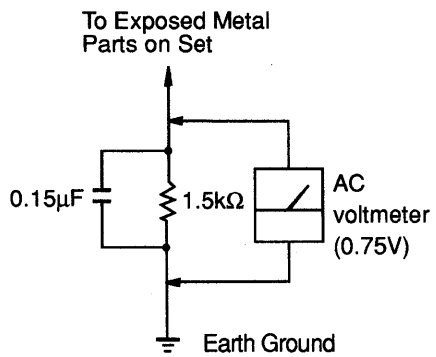



Fig. A. Using an AC voltmeter to check AC leakage.

**SAFETY-RELATED COMPONENT WARNING !!**

**COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.**

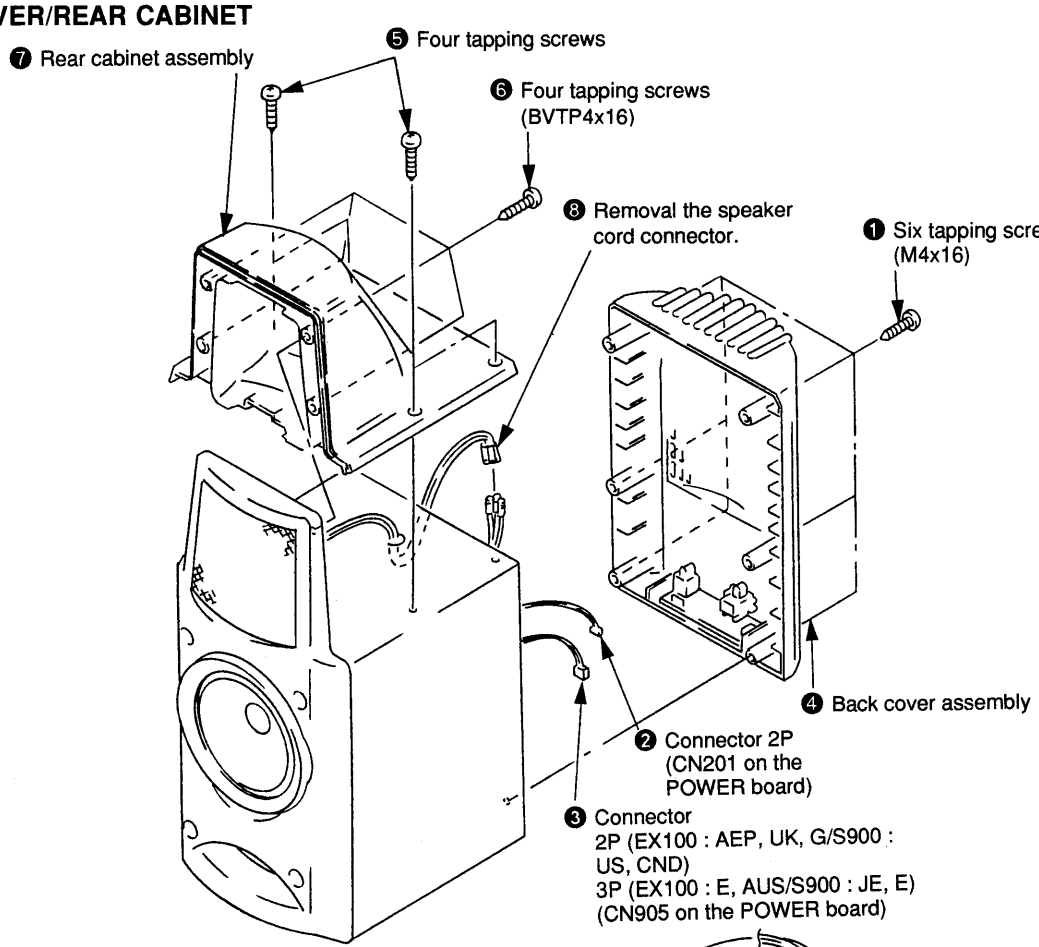
**ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!!**

**LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.**

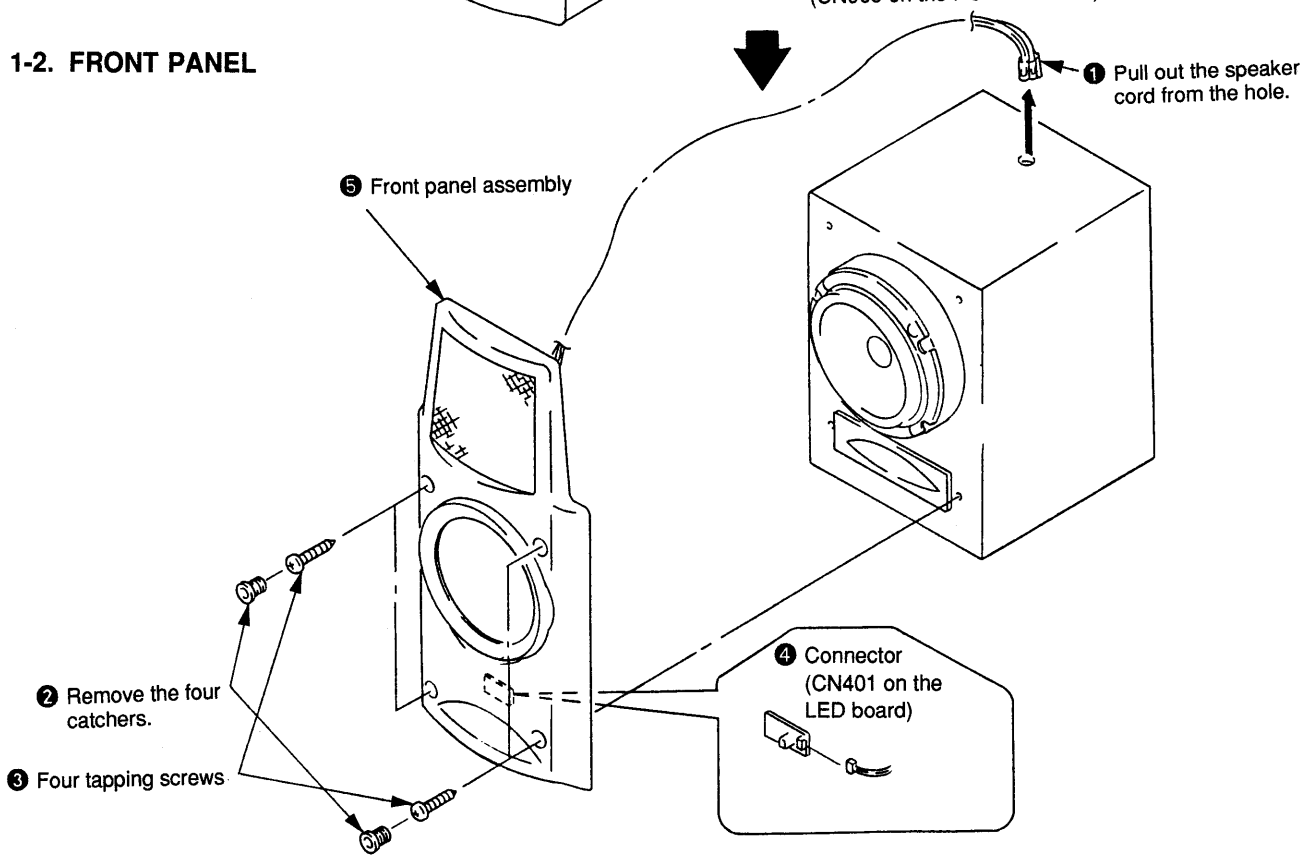
# SECTION 1
# DISASSEMBLY

**Note :** Follow the disassembly procedure in the number order given.

## 1-1. BACK COVER/REAR CABINET

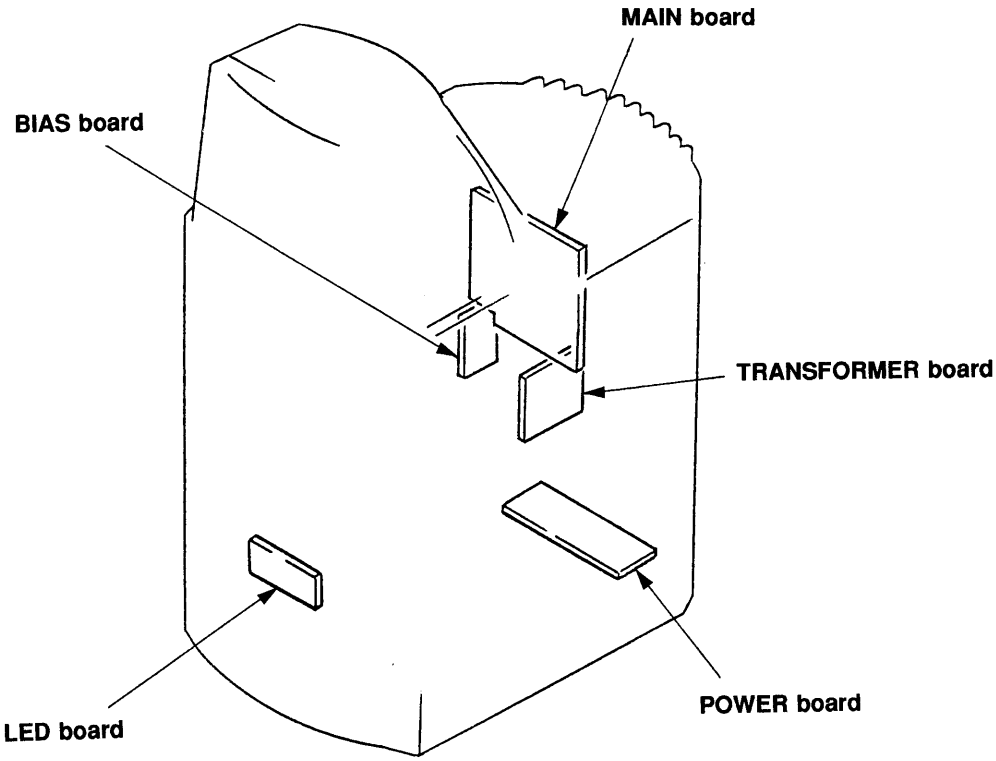

❼ Rear cabinet assembly
❺ Four tapping screws
❻ Four tapping screws (BVTP4x16)
❽ Removal the speaker cord connector.
❶ Six tapping screws (M4x16)
❹ Back cover assembly
❷ Connector 2P (CN201 on the POWER board)
❸ Connector 2P (EX100 : AEP, UK, G/S900 : US, CND) 3P (EX100 : E, AUS/S900 : JE, E) (CN905 on the POWER board)

## 1-2. FRONT PANEL


❶ Pull out the speaker cord from the hole.
❺ Front panel assembly
❹ Connector (CN401 on the LED board)
❷ Remove the four catchers.
❸ Four tapping screws

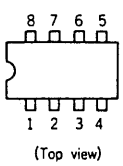
# SECTION 2
# DIAGRAMS

## 2-1. CIRCUIT BOARDS LOCATION

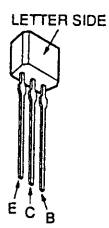



## 2-2. SEMICONDUCTOR LEAD LAYOUTS

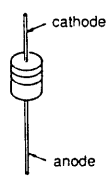
**RC5532DD**



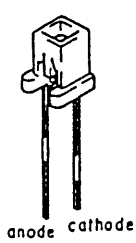

**2SA1175-HFE**



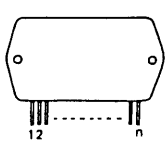

**HZS16-2L**



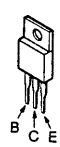

**SEL3510C-CD**



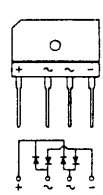

**STK401-100B**



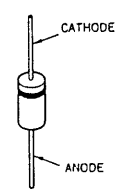

**2SB1094-LK**
**2SD2012**



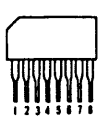

**RBA-402**



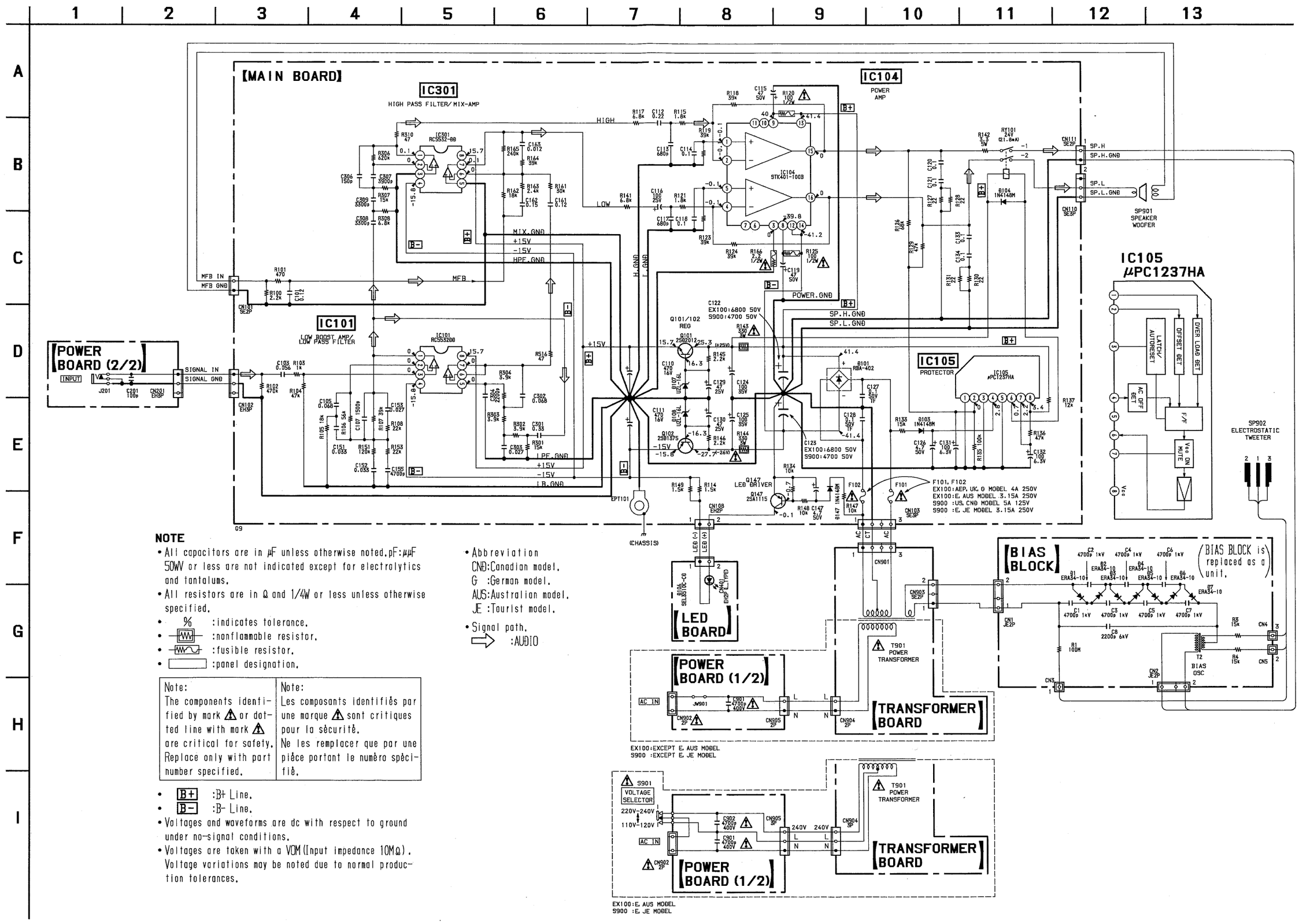
**1N4148M**




**μPC1237HA**



## 2-3. SCHEMATIC DIAGRAM




### NOTE

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- % :indicates tolerance.
- :nonflammable resistor.
- :fusible resistor.
- :panel designation.

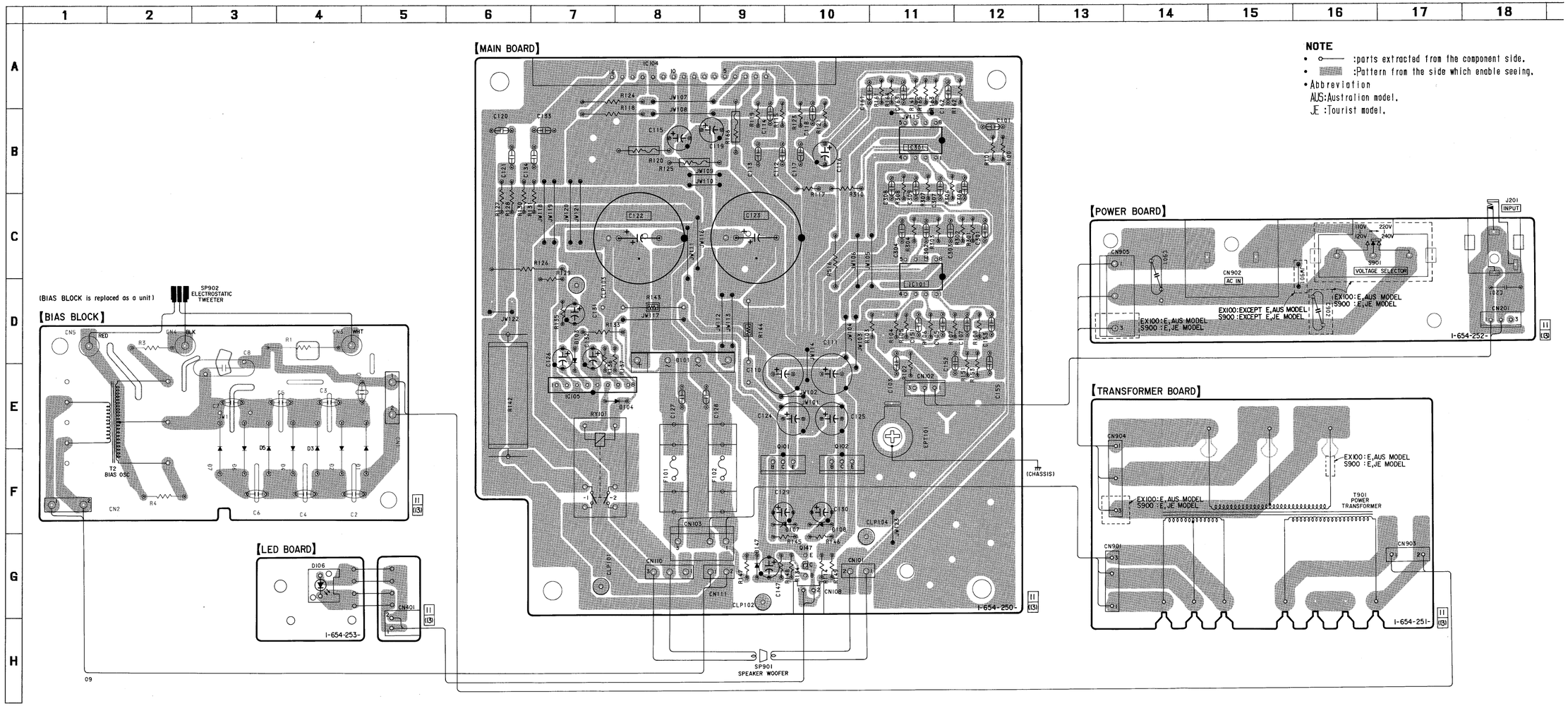
| Note: | Note: |
|---|---|
| The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified. | Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié. |

- B+ :B+ Line.
- B− :B− Line.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.

- Abbreviation
  CND: Canadian model.
  G : German model.
  AUS: Australian model.
  JE : Tourist model.
- Signal path.
  ⇨ :AUDIO

## 2-4. PRINTED WIRING BOARD

- See page 4 for Circuit Boards Location.
- See page 4 for Semiconductor Lead Layouts.




- Semiconductor Location

| Ref. No. | Location |
|---|---|
| D101 | E-8 |
| D103 | D-7 |
| D104 | E-8 |
| D106 | G-4 |
| D107 | G-9 |
| D108 | F-10 |
| D147 | G-9 |
| IC101 | D-11 |
| IC104 | A-7 |
| IC105 | E-7 |
| IC301 | B-11 |
| Q101 | F-9 |
| Q102 | F-10 |
| Q147 | G-10 |

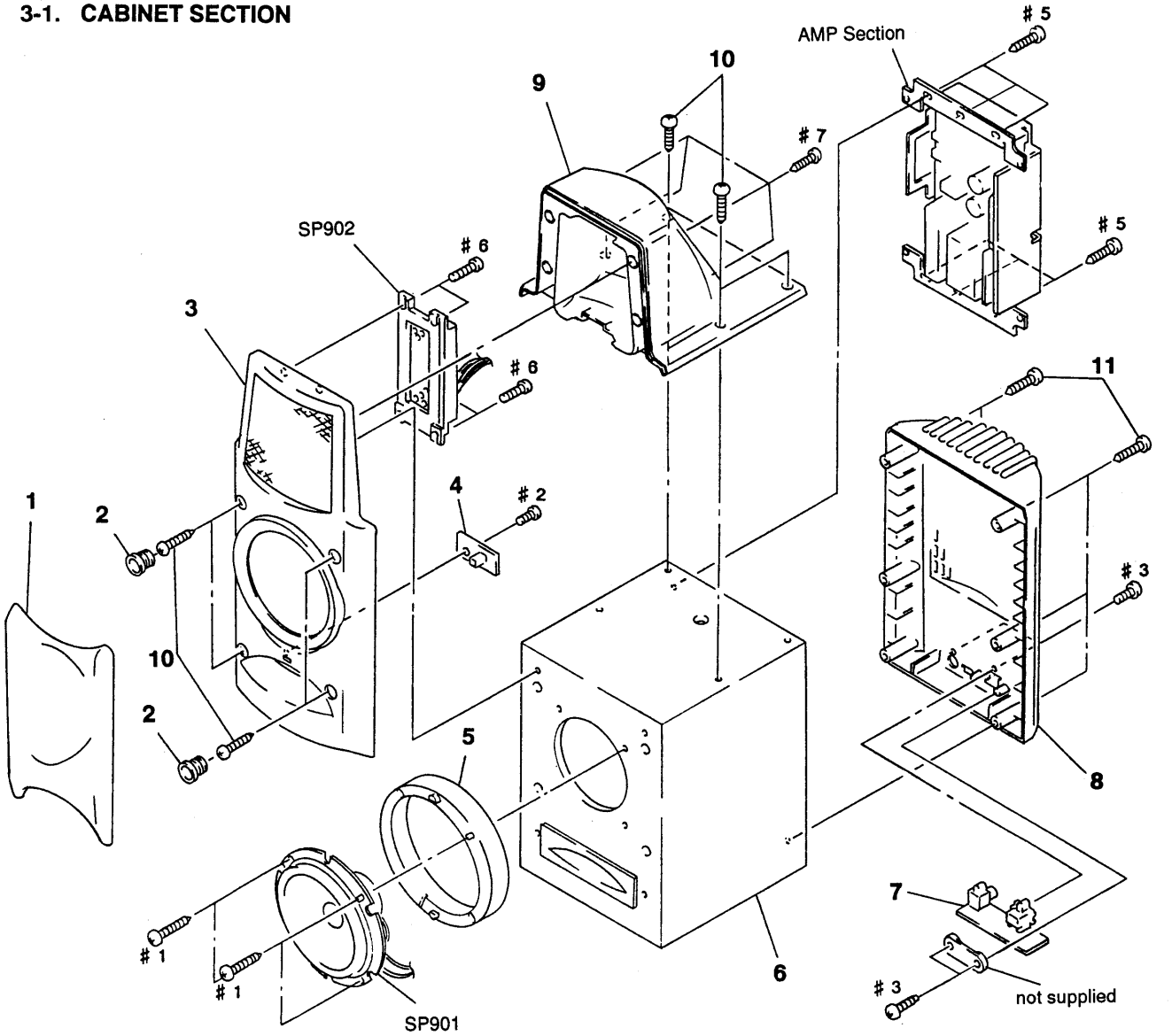
# SECTION 3
# EXPLODED VIEWS

NOTE:
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Abbreviation
  CND : Canadian model
  G : German model
  AUS : Australian model
  JE : Tourist model
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

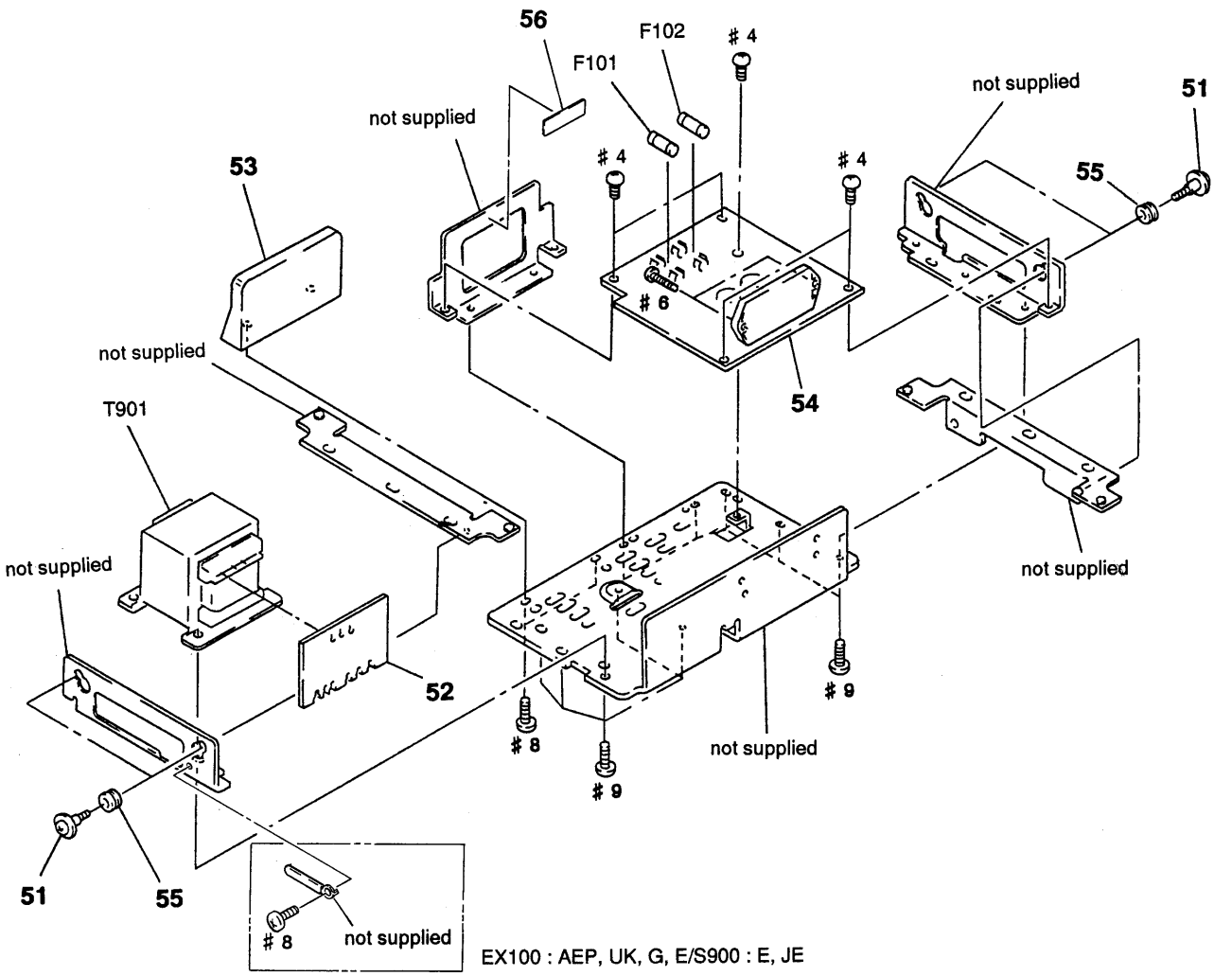
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

## 3-1. CABINET SECTION




| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 1 | X-4945-291-1 | FRAME ASSY, GRILLE | |
| 2 | 4-912-253-01 | CATCHER | |
| 3 | X-4945-290-1 | PANEL ASSY, FRONT (EX100/S900:JE, E) | |
| 3 | X-4945-541-1 | PANEL ASSY, FRONT (S900:US, CND) | |
| * 4 | 1-654-253-11 | LED BOARD | |
| * 5 | X-4945-293-1 | RING ASSY, WOOFER | |
| * 6 | A-4361-186-A | CABINET ASSY, SPEAKER (EXCEPT EX100:G) | |
| * 6 | A-4361-310-A | CABINET ASSY, SPEAKER (EX100:G) | |
| * 7 | 1-654-252-11 | POWER BOARD | |
| 8 | X-4945-731-1 | COVER ASSY, BACK (EX100:AEP, UK, G) | |
| 8 | X-4945-860-1 | COVER ASSY, BACK (S900:US, CND) | |
| 8 | X-4945-861-1 | COVER ASSY, BACK (EX100:E, AUS/S900:JE, E) | |
| * 9 | X-4945-292-1 | CABINET ASSY, REAR (EX100/S900:JE, E) | |
| * 9 | X-4945-542-1 | CABINET ASSY, REAR (S900:US, CND) | |
| 10 | 4-962-063-01 | SCREW | |
| 11 | 4-923-040-11 | SCREW (4X16), TAPPING | |
| SP901 | 1-504-671-11 | SPEAKER (WOOFER) (15cm) | |
| SP902 | 1-504-680-11 | SPEAKER (TWEETER) (2. 2X10) (EX100/S900:JE, E) | |
| SP902 | 1-504-680-21 | SPEAKER (TWEETER) (2. 2X10) (S900:US, CND) | |

## 3-2. AMP SECTION




EX100 : AEP, UK, G, E/S900 : E, JE

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 51 | 4-959-869-01 | SCREW (STEP) (M3X6) | |
| * 52 | 1-654-251-11 | TRANSFORMER BOARD | |
| 53 | A-4361-196-A | BIAS BLOCK ASSY (EX100/S900:JE, E) | |
| 53 | A-4361-296-A | BIAS BLOCK ASSY (S900:US, CND) | |
| * 54 | A-4377-583-A | MAIN BOARD, COMPLETE (EX100) | |
| * 54 | A-4377-584-A | MAIN BOARD, COMPLETE (S900) | |
| * 55 | 4-941-563-01 | BUSHING | |
| 56 | 3-703-044-26 | LABEL, CAUTION (S900:US, CND) | |
| ⚠F101 | 1-532-237-00 | FUSE, TIME LAG (3.15A 250V) (EX100:E, AUS/S900:JE, E) | |
| ⚠F101 | 1-532-350-00 | FUSE (4A 250V) (EX100:AEP, UK, G) | |
| ⚠F101 | 1-533-420-11 | FUSE, GLASS CYLINDRICAL (DIA. 5) (5A 125V) (S900:US, CND) | |
| ⚠F102 | 1-532-237-00 | FUSE, TIME LAG (3.15A 250V) (EX100:E, AUS/S900:JE, E) | |
| ⚠F102 | 1-532-350-00 | FUSE (4A 250V) (EX100:AEP, UK, G) | |
| ⚠F102 | 1-533-420-11 | FUSE, GLASS CYLINDRICAL (DIA. 5) (5A 125V) (S900:US, CND) | |
| ⚠T901 | 1-427-744-11 | TRANSFORMER, POWER (S900:US, CND) | |
| ⚠T901 | 1-427-745-11 | TRANSFORMER, POWER (EX100:AEP, UK, G) | |
| ⚠T901 | 1-427-746-11 | TRANSFORMER, POWER (EX100:E, AUS/S900:JE, E) | |

LED MAIN

# SECTION 4
# ELECTRICAL PARTS LIST

NOTE:

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Abbreviation
  CND : Canadian model
  G : German model
  AUS : Australian model
  JE : Tourist model

- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F : nonflammable
- SEMICONDUCTORS
  In each case, u: μ , for example:
  uA...: μA..., uPA...: μPA..., uPB...: μPB..., uPC...: μPC..., uPD...: μPD...
- CAPACITORS
  uF : μF
- COILS
  uH : μH

| Ref.No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| * | 1-654-253-11 | LED BOARD | | | |
| | | ********* | | | |
| | | < CONNECTOR > | | | |
| CN401 | 1-564-517-11 | PLUG, CONNECTOR 2P | | | |
| | | < DIODE > | | | |
| D106 | 8-719-018-46 | DIODE SEL3510C-CD | | | |
| ********** | | | | | |
| * | A-4377-583-A | MAIN BOARD, COMPLETE (EX100) | | | |
| | | ********** | | | |
| * | A-4377-584-A | MAIN BOARD, COMPLETE (S900) | | | |
| | | ********** | | | |
| | 1-533-293-11 | FUSE HOLDER | | | |
| | | < CAPACITOR > | | | |
| C101 | 1-136-166-00 | FILM | 0.12uF | 5% 50V | |
| C103 | 1-136-162-00 | FILM | 0.056uF | 5% 50V | |
| C105 | 1-136-163-00 | FILM | 0.068uF | 5% 50V | |
| C107 | 1-130-473-00 | MYLAR | 0.0015uF | 5% 50V | |
| C110 | 1-126-012-11 | ELECT | 470uF | 20% 16V | |
| C111 | 1-126-012-11 | ELECT | 470uF | 20% 16V | |
| C112 | 1-136-169-00 | FILM | 0.22uF | 5% 50V | |
| C113 | 1-130-469-00 | MYLAR | 680PF | 5% 50V | |
| C114 | 1-136-165-00 | FILM | 0.1uF | 5% 50V | |
| C115 | 1-124-910-11 | ELECT | 47uF | 20% 50V | |
| C116 | 1-124-122-11 | ELECT | 100uF | 20% 50V | (EX100) |
| C116 | 1-124-478-11 | ELECT | 100uF | 20% 25V | (S900) |
| C117 | 1-130-469-00 | MYLAR | 680PF | 5% 50V | |
| C118 | 1-136-165-00 | FILM | 0.1uF | 5% 50V | |
| C119 | 1-124-910-11 | ELECT | 47uF | 20% 50V | |
| C120 | 1-136-165-00 | FILM | 0.1uF | 5% 50V | |
| C121 | 1-136-165-00 | FILM | 0.1uF | 5% 50V | |
| C122 | 1-110-667-11 | ELECT | 6800uF | 50V | (EX100) |
| C122 | 1-126-138-11 | ELECT | 4700uF | 20% 50V | (S900) |
| C123 | 1-110-667-11 | ELECT | 6800uF | 50V | (EX100) |
| C123 | 1-126-138-11 | ELECT | 4700uF | 20% 50V | (S900) |
| C124 | 1-124-122-11 | ELECT | 100uF | 20% 50V | |
| C125 | 1-124-122-11 | ELECT | 100uF | 20% 50V | |
| C126 | 1-124-927-11 | ELECT | 4.7uF | 20% 100V | |
| C127 | 1-136-165-00 | FILM | 0.1uF | 5% 50V | |
| C128 | 1-136-165-00 | FILM | 0.1uF | 5% 50V | |
| C129 | 1-124-910-11 | ELECT | 47uF | 20% 50V | |
| C130 | 1-124-910-11 | ELECT | 47uF | 20% 50V | |
| C131 | 1-124-443-00 | ELECT | 100uF | 20% 10V | |
| C132 | 1-124-443-00 | ELECT | 100uF | 20% 10V | |
| C133 | 1-136-165-00 | FILM | 0.1uF | 5% 50V | |
| C134 | 1-136-165-00 | FILM | 0.1uF | 5% 50V | |
| C147 | 1-124-927-11 | ELECT | 4.7uF | 20% 100V | |
| C151 | 1-136-159-00 | FILM | 0.033uF | 5% 50V | |
| C152 | 1-136-159-00 | FILM | 0.033uF | 5% 50V | |
| C153 | 1-130-488-00 | MYLAR | 0.027uF | 5% 50V | |
| C155 | 1-130-479-00 | MYLAR | 0.0047uF | 5% 50V | |
| C161 | 1-136-166-00 | FILM | 0.12uF | 5% 50V | |
| C162 | 1-136-167-00 | FILM | 0.15uF | 5% 50V | |
| C163 | 1-130-484-00 | MYLAR | 0.012uF | 5% 50V | |
| C301 | 1-136-171-00 | FILM | 0.33uF | 5% 50V | |
| C302 | 1-136-163-00 | FILM | 0.068uF | 5% 50V | |
| C303 | 1-130-488-00 | MYLAR | 0.027uF | 5% 50V | |
| C304 | 1-130-475-00 | MYLAR | 0.0022uF | 5% 50V | |
| C306 | 1-110-337-51 | MYLAR | 150PF | 5% 50V | |
| C307 | 1-130-478-00 | MYLAR | 0.0039uF | 5% 50V | |
| C308 | 1-130-477-00 | MYLAR | 0.0033uF | 5% 50V | |
| C309 | 1-130-477-00 | MYLAR | 0.0033uF | 5% 50V | |
| | | < CONNECTOR > | | | |
| CN101 | 1-566-693-11 | PIN, CONNECTOR 2P | | | |
| CN102 | 1-564-506-11 | PLUG, CONNECTOR 3P | | | |
| CN103 | 1-565-395-11 | PIN, CONNECTOR 3P | | | |
| CN108 | 1-564-517-11 | PLUG, CONNECTOR 2P | | | |
| CN110 | 1-564-214-11 | PIN, CONNECTOR 3P | | | |
| CN111 | 1-566-693-11 | PIN, CONNECTOR 2P | | | |
| | | < DIODE > | | | |
| D101 | 8-719-312-09 | DIODE RBA-402 | | | |
| D103 | 8-719-987-63 | DIODE 1N4148M | | | |
| D104 | 8-719-987-63 | DIODE 1N4148M | | | |
| D107 | 8-719-933-88 | DIODE HZS16-2L | | | |
| D108 | 8-719-933-88 | DIODE HZS16-2L | | | |
| D147 | 8-719-987-63 | DIODE 1N4148M | | | |

| Ref.No. | Part No. | Description | | | | Remark |
|---|---|---|---|---|---|---|
| | | < GROUND PLATE > | | | | |
| * EPT101 | 4-870-539-00 | PLATE, GROUND | | | | |
| | | < FUSE > | | | | |
| ⚠F101 | 1-532-237-00 | FUSE, TIME LAG (3.15A 250V) (EX100:E, AUS/S900:E, JE) | | | | |
| ⚠F101 | 1-532-350-00 | FUSE, (4A 250V) (EX100:AEP, UK, G) | | | | |
| ⚠F101 | 1-533-420-11 | FUSE, GLASS CYLINDRICAL (DIA.5) (5A 125V) (S900:US, CND) | | | | |
| ⚠F102 | 1-532-237-00 | FUSE, TIME LAG (3.15A 250V) (EX100:E, AUS/S900:E, JE) | | | | |
| ⚠F102 | 1-532-350-00 | FUSE, (4A 250V) (EX100:AEP, UK, G) | | | | |
| ⚠F102 | 1-533-420-11 | FUSE, GLASS CYLINDRICAL (DIA.5) (5A 125V) (S900:US, CND) | | | | |
| | | < IC > | | | | |
| IC101 | 8-759-982-03 | IC RC5532DD | | | | |
| IC104 | 8-749-924-68 | IC STK401-100B | | | | |
| IC105 | 8-759-111-68 | IC uPC1237HA | | | | |
| IC301 | 8-759-982-03 | IC RC5532DD | | | | |
| | | < TRANSISTOR > | | | | |
| Q101 | 8-729-209-15 | TRANSISTOR 2SD2012 | | | | |
| Q102 | 8-729-141-83 | TRANSISTOR 2SB1094-LK | | | | |
| Q147 | 8-729-119-76 | TRANSISTOR 2SA1175-HFE | | | | |
| | | < RESISTOR > | | | | |
| R100 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W | F |
| R101 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W | F |
| R102 | 1-247-895-00 | CARBON | 470K | 5% | 1/4W | |
| R103 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | F |
| R104 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R105 | 1-249-432-11 | CARBON | 18K | 5% | 1/4W | |
| R106 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W | |
| R107 | 1-249-436-11 | CARBON | 39K | 5% | 1/4W | |
| R108 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W | |
| R114 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W | F |
| R115 | 1-249-420-11 | CARBON | 1.8K | 5% | 1/4W | F |
| R117 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W | F |
| R118 | 1-249-436-11 | CARBON | 39K | 5% | 1/4W | |
| R119 | 1-249-436-11 | CARBON | 39K | 5% | 1/4W | |
| ⚠R120 | 1-212-982-00 | FUSIBLE | 100 | 5% | 1/2W | F |
| R121 | 1-249-420-11 | CARBON | 1.8K | 5% | 1/4W | F |
| R123 | 1-249-436-11 | CARBON | 39K | 5% | 1/4W | |
| R124 | 1-249-436-11 | CARBON | 39K | 5% | 1/4W | |
| ⚠R125 | 1-212-982-00 | FUSIBLE | 100 | 5% | 1/2W | F |
| R126 | 1-249-439-11 | CARBON | 68K | 5% | 1/4W | |
| R127 | 1-249-397-11 | CARBON | 22 | 5% | 1/4W | F |
| R128 | 1-249-397-11 | CARBON | 22 | 5% | 1/4W | F |
| R129 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R130 | 1-249-397-11 | CARBON | 22 | 5% | 1/4W | F |
| R131 | 1-249-397-11 | CARBON | 22 | 5% | 1/4W | F |
| R133 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W | |
| R134 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R135 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W | |
| R136 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W | |
| R137 | 1-249-430-11 | CARBON | 12K | 5% | 1/4W | |
| R141 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W | F |
| R142 | 1-208-960-11 | METAL PLATE | 3.3 | | 5W | |
| ⚠R143 | 1-215-914-11 | METAL OXIDE | 330 | 5% | 3W | F |
| ⚠R144 | 1-215-914-11 | METAL OXIDE | 330 | 5% | 3W | F |
| R145 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W | F |
| R146 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W | F |
| R147 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R148 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R149 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W | F |
| R151 | 1-247-881-00 | CARBON | 120K | 5% | 1/4W | |
| R153 | 1-247-862-11 | CARBON | 20K | 5% | 1/4W | |
| R161 | 1-247-866-11 | CARBON | 30K | 5% | 1/4W | |
| R162 | 1-249-432-11 | CARBON | 18K | 5% | 1/4W | |
| R163 | 1-247-840-00 | CARBON | 2.4K | 5% | 1/4W | |
| R164 | 1-249-436-11 | CARBON | 39K | 5% | 1/4W | |
| R165 | 1-247-888-11 | CARBON | 240K | 5% | 1/4W | |
| ⚠R166 | 1-212-942-00 | FUSIBLE | 2.2 | 5% | 1/2W | F |
| R301 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W | |
| R302 | 1-249-424-11 | CARBON | 3.9K | 5% | 1/4W | F |
| R303 | 1-249-424-11 | CARBON | 3.9K | 5% | 1/4W | F |
| R304 | 1-249-424-11 | CARBON | 3.9K | 5% | 1/4W | F |
| R306 | 1-247-898-11 | CARBON | 620K | 5% | 1/4W | |
| R307 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W | |
| R308 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W | F |
| R310 | 1-249-401-11 | CARBON | 47 | 5% | 1/4W | F |
| R516 | 1-249-401-11 | CARBON | 47 | 5% | 1/4W | F |
| | | < RELAY > | | | | |
| RY101 | 1-515-920-11 | RELAY (24V) | | | | |
| ********** | | | | | | |
| * | 1-654-252-11 | POWER BOARD ********** | | | | |
| | | < CAPACITOR > | | | | |
| C201 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V | |
| ⚠C901 | 1-161-743-00 | CERAMIC | 0.0047uF | | 400V | |
| ⚠C902 | 1-161-743-00 | CERAMIC | 0.0047uF | | 400V (EX100:E, AUS/S900:E, JE) | |
| | | < CONNECTOR > | | | | |
| CN201 | 1-564-506-11 | PLUG, CONNECTOR 3P | | | | |

| | |
|---|---|
| The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.<br>Replace only with part number specified. | Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.<br>Ne les remplacer que par une piéce portant le numéro spécifié. |

# POWER TRANSFORMER

| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| ⚠CN902 | 1-526-930-11 | INLET, AC (AC IN) (S900) | |
| ⚠CN902 | 1-526-931-11 | INLET, AC (AC IN) (EX100) | |
| CN905 | 1-564-321-00 | PIN, CONNECTOR 2P (EX100:AEP, UK, G/S900:US, CND) | |
| CN905 | 1-564-687-11 | PIN, CONNECTOR 3P (EX100:E, AUS/S900:E, JE) | |
| | | < JACK > | |
| J201 | 1-750-969-11 | JACK, PIN (INPUT) | |
| | | < SWITCH > | |
| ⚠S901 | 1-572-675-11 | SWITCH, POWER VOLTAGE CHANGE (VOLTAGE SELECTOR) (EX100:E, AUS/S900:E, JE) | |
| ********** | | | |
| * | 1-654-251-11 | TRANSFORMER BOARD ********** | |
| | | < CONNECTOR > | |
| CN903 | 1-568-226-11 | PIN, CONNECTOR 2P | |
| CN904 | 1-769-292-31 | LEAD (WITH CONNECTOR) (3 CORE) (EX100:E, AUS/S900:E, JE) | |
| CN904 | 1-690-123-31 | REED (WITH CONNECTOR) (2 CORE) (EX100:AEP, UK, G/S900:US, CND) | |
| | | < TRANSFORMER > | |
| ⚠T901 | 1-427-744-11 | TRANSFORMER, POWER (S900:US, CND) | |
| ⚠T901 | 1-427-745-11 | TRANSFORMER, POWER (EX100:AEP, UK, G) | |
| ⚠T901 | 1-427-746-11 | TRANSFORMER, POWER (EX100:E, AUS/S900:E, JE) | |
| ********** | | | |
| | | MISCELLANEOUS ********** | |
| ⚠F101 | 1-532-237-00 | FUSE, TIME LAG (3.15A 250V) (EX100:E, AUS/S900:E, JE) | |
| ⚠F101 | 1-532-350-00 | FUSE (4A 250V) (EX100:AEP, UK, G) | |
| ⚠F101 | 1-533-420-11 | FUSE, GLASS CYLINDRICAL (DIA. 5) (5A 125V) (S900:US, CND) | |
| ⚠F102 | 1-532-237-00 | FUSE, TIME LAG (3.15A 250V) (EX100:E, AUS/S900:E, JE) | |
| ⚠F102 | 1-532-350-00 | FUSE (4A 250V) (EX100:AEP, UK, G) | |
| ⚠F102 | 1-533-420-11 | FUSE, GLASS CYLINDRICAL (DIA. 5) (5A 125V) (S900:US, CND) | |
| SP901 | 1-504-671-11 | SPEAKER (WOOFER) (15cm) | |
| SP902 | 1-504-680-11 | SPEAKER (TWEETER) (2.2X10) (EX100/S900:E, JE) | |
| SP902 | 1-504-680-21 | SPEAKER (TWEETER) (2.2X10) (S900:US, CND) | |
| ⚠T901 | 1-427-744-11 | TRANSFORMER, POWER (S900:US, CND) | |
| ⚠T901 | 1-427-745-11 | TRANSFORMER, POWER (EX100:AEP, UK, G) | |
| ⚠T901 | 1-427-746-11 | TRANSFORMER, POWER (EX100:E, AUS/S900:E, JE) | |
| ********** | | | |
| | | ACCESSORIES & PACKING MATERIALS ********** | |
| ⚠ | 1-575-706-31 | CORD, POWER (S900:US, CND) | |
| ⚠ | 1-765-293-11 | CORD, POWER (EX100:AEP, E, G, AUS) | |
| ⚠ | 1-769-312-11 | CORD, POWER (EX100:UK) | |
| | 1-769-329-11 | CORD, CONNECTION (PIN-PIN) (2.5m) | |
| ⚠ | 1-769-459-11 | CORD, POWER (S900:E, JE) | |
| | 3-701-940-01 | LABEL, BEAB (EX100:UK) | |
| | 3-798-348-11 | MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE, GERMAN, DUTCH, SWEDISH, ITALIAN, CHINESE, KOREAN, ARABIC) | |
| * | 4-971-160-01 | CUSHION (UPPER) | |
| * | 4-971-161-01 | CUSHION (LOWER) | |
| * | 4-972-595-01 | INDIVIDUAL CARTON (EX100:AEP, UK, G, AUS) | |
| * | 4-972-596-01 | INDIVIDUAL CARTON (EX100:E) | |
| * | 4-973-623-01 | INDIVIDUAL CARTON (S900:US, CND) | |
| * | 4-973-624-01 | INDIVIDUAL CARTON (S900:JE) | |
| * | 4-973-625-01 | INDIVIDUAL CARTON (S900:E) | |
| ********** | | | |
| | | ********** HARDWARE LIST ********** | |
| #1 | 7-621-849-50 | SCREW, WOOD +R 4.1X40 | |
| #2 | 7-685-134-19 | SCREW +P 2.6X8 TYPE2 NON-SLIT | |
| #3 | 7-685-147-19 | SCREW +P 3X10 TYPE2 NON-SLIT | |
| #4 | 7-682-548-04 | SCREW +BVTT 3X8 (S) | |
| #5 | 7-685-163-01 | SCREW +P 4X16 TYPE1 | |
| #6 | 7-685-650-79 | SCREW +BVTP 3X16 TYPE2 IT-3 | |
| #7 | 7-685-663-79 | SCREW +BVTP 4X16 TYPE2 IT-3 | |
| #8 | 7-685-647-79 | SCREW +BVTP 3X10 TYPE2 IT-3 | |
| #9 | 7-682-549-04 | SCREW +BVTT 3X10 (S) | |

| | |
|---|---|
| The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.<br>Replace only with part number specified. | Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.<br>Ne les remplacer que par une piéce portant le numéro spécifié. |

9-959-953-11

**Sony Corporation**
**Consumer A&V Products Company**
**Home A&V Products Div.**

**English**
95A09110-1
Printed in Japan
© 1995. 1
**Published by Home A&V Products Div.**
**Quality Engineering Dept.**